

REMARKS

Continued prosecution and consideration of the claimed subject matter in the accompanying patent application is respectfully requested.

Claims 1-25 are cancelled, as are claims 27-30, 33, 35, 42-45, and 47-51. Claims 42-45 and 47-51 were previously withdrawn. Claims 26, 41, 46 and 54 have been amended. Claims 58-61 have been added. Claims 26, 31-32, 34, 36-41, 46, and 52-61 are in the case and are before the Examiner.

I. The Amendments

Each of the independent claims, claims 26, 41, 46 and 54 has been amended by the addition of the recitation that the of claim 27 presenting carrier is a "peptide or polypeptide" and the proteinaceous carrier of claim 28, pursuant to the Action's comment that claims 28-32, 34, 39, 52 and 53 were objected to as depending from rejected claims. In view of the present amendments, it is believed that the pending claims are allowable on the record.

New claim 58 is based on former claim 26 that includes the recitation of claim 27 as to the heterologous presenting carrier being a peptide or polypeptide and a recitation that the fusion protein is a polypeptide expression product of gene construct that encodes the two portions of the fusion protein. This claim is supported at least by the disclosures of claims

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26, 27, 41, 42 and 46, as well as the specification at page 8, lines 8-31.

These amendments add no new matter.

II. The Action

A. Rejection Under 35 USC §112, Second Paragraph

Withdrawal of the rejection under the Second Paragraph of Section 112 is noted with appreciation.

B. Rejection Under 35 USC §102(b)

Claims 26, 27, 36, 37, 38, 40, 41, 46, and 54-56 were again rejected under Section 102(b) as allegedly being anticipated by the disclosures of Kurtz et al. US Patent No. 5,691,189, hereinafter Kurtz. The gist of this rejection is that Kurtz expresses the M2 protein in yeast cells and those cells constitute a heterologous presenting carrier. This basis for rejection cannot be agreed with and is respectfully traversed.

It is believed that these claims are free of this art and are therefore allowable on the record based on the statement in the Action as to the objection to claims 28-32, 34, 39, 52 and 53 as depending from rejected claims. It is submitted that any of the present claims that are dependent from claim 26 as presently amended should also be free of the art and allowable. Still further, it is submitted that the claims herein that are not dependent from amended claim 26 that recite the features of

claims 27 and 28 that are recited in amended claim 26 should also be free of the art and allowable on this record.

In addition, the new claims should also be allowable as they recite a fusion protein that is the expression product of "a gene construct comprising a coding sequence for a immunogenic extracellular portion of an influenza virus . . . linked to a coding sequence for a presenting carrier peptide or polypeptide . . ." The relied-on disclosure does not include an influenza protein linked to anything, but rather at most an influenza protein extruded into and through a cell membrane. A cell containing such an extrudate is not a fusion polypeptide. It is submitted that the present amendments and new claims clearly distinguish the claimed subject matter from the yeast cell carrier with inserted M2 of Kurtz, and that this basis for rejection should be withdrawn for all of the pending claims.

C. Rejection Under 35 USC §103

Claims 26, 27, 36, 37, 38, 40, 41, 46 and 54-57 were again rejected as allegedly obvious over the disclosures of Kurtz, as above, in view of Sunstrom et al., *J. Membrane Biol.* 1996 **150**:127-132, hereinafter "Sunstrom". The gist of this argument is that the NB protein of influenza B forms ion channels as does the M2 protein, so it would be obvious to substitute the influenza B NB protein for the M2 protein of Kurtz into a Kurtz yeast. This basis for rejection cannot be agreed with and is respectfully traversed.

It is respectfully submitted that this basis for rejection is inapt at least because the Kurtz teaching did not anticipate the claimed subject matter as discussed previously. An extrudate of an influenza protein extruded into and through a cell membrane is not a fusion polypeptide. That point is underscored by the Action's note concerning the objection to claims 28 et al., and the presumed art freedom of those claims.

Such an extrudate construct does not and cannot make obvious a fusion polypeptide of the claims. Thus, whether the influenza protein used in a Kurtz yeast construct is the M2 protein of influenza A or the NB protein of influenza B, neither yeast construct is a fusion polypeptide, nor does either construct teach or suggest such a fusion polypeptide.

III. Further Art

Enclosed herewith and noted on enclosed Form PTO/SB/O8B and in an IDS are documents from an Opposition Proceeding in the European Patent Office involving the corresponding European application. It is noted that Documents D1 and D2 cited by Vaxinnate (the Bramps and Neiryneck theses, respectively) are believed to be inappropriately relied-on because neither document was accompanied by any evidence of when they were publicly available, as by being cited in a library catalogue or other index.

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IV. Summary

Claims 26, 41, 46 and 54 have been amended. Claims 58-61 have been added. Claims 42-45 and 47-51 were previously withdrawn have been cancelled. Each basis for rejection or objection has been overcome or otherwise made moot.


It is therefore believed that this application is in condition for allowance of all of the pending claims. An early notice to that effect is earnestly solicited.

No further fee or petition is believed to be necessary. However, should any further fee be needed, please charge our Deposit Account No. 23-0920, and deem this paper to be the required petition.

The Examiner is requested to phone the undersigned should any questions arise that can be dealt with over the phone to expedite this prosecution. It is noted that the undersigned is a new counsel for this application. A formal Power of Attorney is enclosed herewith.

Respectfully submitted,

By


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Enclosures

RCE and fee

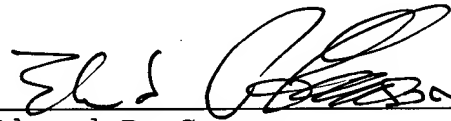
Petition for Extension of Time and fee

Information Disclosure Statement and Art

CERTIFICATE OF MAILING

I hereby certify that this Reply and Amendment, along with its stated enclosures and its fees, are being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on November 21, 2007.

By



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